

# ELECTRONIC DEVICE WITH FORCE SENSING KEY

## ABSTRACT OF THE DISCLOSURE

1     An electronic device with a force sensing key (200) has a switch (280), a first force  
2     sensing region (290) for acquiring a first force value, a second force sensing region  
3     (290) for acquiring a second force value, and a processor for determining a selected  
4     function for the key (200) based upon the first force value and the second force  
5     value when the switch (280) is activated. The first force sensing pad (290) and the  
6     second force sensing pad (290) use a partially resistive material (250) that exhibits  
7     a force-to-voltage response value. By forming the switch (280) as a dome (225)  
8     switch, the force sensing key (200) provides crisp tactile feedback to a user. The  
9     force sensing key (200) can be configured for a variety of applications and user  
10    preferences by varying the architecture of the actuator (270).